

SEQUENCE LISTING

<110> Conklin, Darrell C.
Blumberg, Hal

<120> A HUMAN 2-19 PROTEIN HOMOLOGUE, Z219A

<130> 97-63C1

<150> US 60/061,712
<151> 1997-10-06

<150> US 09/167,513
<151> 1998-10-06

<160> 28

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 876
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (119)...(823)

<400> 1

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| gcccgccctt | gccccacacg | accgctgccc | gccccttgcc | ttcctgaccc | aggggctccg | 60 |
| ctggctgcgg | tgcctggga | gctgcccca | gggccaggag | gggagccgca | cctggaaag | 118 |
| atg cgc cca | ttg gct ggt | ggc ctg ctc | aag gtg gtg | ttc gtg gtc | ttc | 166 |
| Met Arg Pro | Leu Ala Gly | Gly Leu Leu | Lys Val Val | Phe Val Val | Phe | |
| 1 | 5 | 10 | 15 | | | |

| | | | | | | |
|-----------------|-------------|-------------|---------|-------------|---------|-----|
| gcc tcc ttg tgt | gcc tgg tat | tcg ggg tac | ctg ctc | gca gag | ctc att | 214 |
| Ala Ser Leu Cys | Ala Trp Tyr | Ser Gly | Tyr Leu | Leu Ala Glu | Leu Ile | |
| 20 | 25 | 30 | | | | |

| | | | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|
| cca gat gca ccc ctg tcc agt gct gcc tat agc atc cgc agc atc ggg Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly | 35 | 40 | 45 | 262 |
| | | | | |
| gag agg cct gtc ctc aaa gct cca gtc ccc aaa agg caa aaa tgt gac Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp | 50 | 55 | 60 | 310 |
| | | | | |
| cac tgg act ccc tgc cca tct gac acc tat gcc tac agg tta ctc agc His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser | 65 | 70 | 75 | 358 |
| | | | | |
| gga ggt ggc aga agc aag tac gcc aaa atc tgc ttt gag gat aac cta Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu | 85 | 90 | 95 | 406 |
| | | | | |
| ctt atg gga gaa cag ctg gga aat gtt gcc aga gga ata aac att gcc Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala | 100 | 105 | 110 | 454 |
| | | | | |
| att gtc aac tat gta act ggg aat gtg aca gca aca cga tgt ttt gat Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp | 115 | 120 | 125 | 502 |
| | | | | |
| atg tat gaa ggc gat aac tct gga ccg atg aca aag ttt att cag agt Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser | 130 | 135 | 140 | 550 |
| | | | | |
| gct gct cca aaa tcc ctg ctc ttc atg gtg acc tat gac gac gga agc Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser | 145 | 150 | 155 | 598 |
| | | | | |
| aca aga ctg aat aac gat gcc aag aat gcc ata gaa gca ctt gga agt Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser | 165 | 170 | 175 | 646 |
| | | | | |
| aaa gaa atc agg aac atg aaa ttc agg tct agc tgg gta ttt att gca Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala | 180 | 185 | 190 | 694 |
| | | | | |
| gca aaa ggc ttg gaa ctc cct tcc gaa att cag aga gaa aag atc aac Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn | 195 | 200 | 205 | 742 |

cac tct gat gct aag aac aac aga tat tct ggc tgg cct gca gag atc
 His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
 210 215 220
 cag ata gaa ggc tgc ata ccc aaa gaa cga agc tgacactgca gggtcctgag
 Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser
 225 230 235
 taaatgtgtt ctgtataaac aaatgcagct gga
 876
 <210> 2
 <211> 235
 <212> PRT
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 Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
 1 5 10 15
 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
 20 25 30
 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly
 35 40 45
 Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 50 55 60
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 65 70 75 80
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 85 90 95
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 100 105 110
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 115 120 125
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser
 130 135 140
 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser
 145 150 155 160
 Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser
 165 170 175
 Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala
 180 185 190
 Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn
 195 200 205

His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
210 215 220

Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser
225 230 235

<210> 3
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<213> Artificial Sequence

<220>
<223> Motif 1, corresponding to residues 127 to 129 of
SEQ ID NO:2

<400> 3

Phe Asp Met

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<210> 4
<211> 3
<212> PRT
<213> Artificial Sequence

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<223> Motif 2, corresponding to residues 156 to 158 of
SEQ ID NO:2

<400> 4

Tyr Asp Asp

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<210> 5
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Motif 3, corresponding to residues 174 to 176 of
SEQ ID NO:2

<400> 5

Leu Gly Ser

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<210> 6
<211> 3
<212> PRT
<213> Artificial Sequence

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<223> Motif 4, corresponding to residues 188 to 190 of
SEQ ID NO:2

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Trp Val Phe
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<210> 7
<211> 3
<212> PRT
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<223> Motif 5, corresponding to residues 227 to 229 of
SEQ ID NO:2

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Glu Gly Cys
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<210> 8
<211> 705
<212> DNA
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<223> z219a Degenerate polynucleotide sequence

<221> variation
<222> (1)...(705)
<223> N is any nucleotide

<221> misc_feature
<222> (1)...(705)
<223> n = A,T,C or G

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| <400> 8 | |
| atgmgnccny tngcnggngg nytnytnaar gtngtnttyg tngtnttygc nwsnytnagy | 60 |
| gcntgtayw snggntayyt nytngcngar ytnathccng aygcncnnyt nwsnwsngcn | 120 |
| gcntaywsna thmgnwsnat hggngarmgn ccngtynytna argcnccngt nccnaarmgn | 180 |
| caraartgyg aycaytggac nccntgyccn wsngayacnt aycntaymg nytnytnwsn | 240 |
| ggngggngnm gnwsnaarta ygcnaarath tgyttyparg ayaayytnyt natggngar | 300 |
| carytnggna aygtngcnmg nggnathaay athgcnathg tnaaytaygt nacnggnaay | 360 |
| gtnacngcna cnmgntgytt ygayatgtay gargngaya aywsnggncc natgacnaar | 420 |
| ttyathcarw sngcngcncc naarwsnytn ytnttyatgg tnacntayga ygayggnwsn | 480 |
| acnmgnyntra ayaaygaygc naaraaygcn athgargcny tnggnwsnaa rgarathmgn | 540 |
| aayatgaart tymgnwsnws ntgggtntty athgcngcna arggnyntra rytnccnwsn | 600 |
| garathcarm gngaraarat haacycaywsn gaygchaaara ayaaymgnta ywsnggntgg | 660 |
| ccngcngara thcarathga rggntgyath ccnaargarm gnwsn | 705 |
| <210> 9 | |
| <211> 19 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer ZC695 | |
| <400> 9 | |
| gatttaggtg acactatacg | 19 |
| <210> 10 | |
| <211> 26 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer ZC7231 | |
| <400> 10 | |
| tttttttttt tttttttttt tttttv | 26 |
| <210> 11 | |
| <211> 20 | |
| <212> DNA | |
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| <220> | |
| <223> Oligonucleotide primer ZC13695 | |

| | |
|--------------------------------------|----|
| <400> 11 | |
| cccttccgaa attcagagag | 20 |
| <210> 12 | |
| <211> 20 | |
| <212> DNA | |
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| <220> | |
| <223> Oligonucleotide primer ZC13789 | |
| <400> 12 | |
| tccctgccca tctgacacacct | 20 |
| <210> 13 | |
| <211> 20 | |
| <212> DNA | |
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| <223> Oligonucleotide primer ZC13790 | |
| <400> 13 | |
| ccagctgttc tcccataagt | 20 |
| <210> 14 | |
| <211> 21 | |
| <212> DNA | |
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| <220> | |
| <223> Oligonucleotide primer ZC14069 | |
| <400> 14 | |
| cttggcatcg ttattcagtc t | 21 |
| <210> 15 | |
| <211> 20 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |

Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 50 55 60
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 65 70 75 80
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 85 90 95
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 100 105 110
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 115 120 125
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser
 130 135 140
 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser
 145 150 155 160
 Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser
 165 170 175
 Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala
 180 185 190
 Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn
 195 200 205
 His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
 210 215 220
 Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser Gly Ser Glu Tyr Met
 225 230 235 240
 Pro Met Glu

<210> 19

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC14870

<400> 19

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25

<210> 20

<211> 24

<212> DNA

<213> Artificial Sequence

<220>
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24

<210> 21
 <211> 8
 <212> PRT
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<220>
 <223> Glu-Glu tag sequence with linker

<400> 21
 Gly Ser Glu Tyr Met Pro Met Glu
 1 5

<210> 22
 <211> 20
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<220>
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<400> 22
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<210> 23
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide primer ZC13007

<400> 23
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19

<210> 24
 <211> 6
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<213> Artificial Sequence

<220>
<223> EE peptide sequence

<400> 24
Glu Tyr Met Pro Val Asp
1 5

<210> 25
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<212> DNA
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<400> 25
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<210> 26
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<223> Oligonucleotide primer ZC12742

<400> 26
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<210> 27
<211> 32
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<220>
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<210> 28

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide primer ZC17185

<400> 28

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32